

AMENDMENTS TO THE CLAIMS

1-20. (Canceled).

21. (New) A method of manufacturing a plasma display panel (PDP) comprising a process of forming a metal oxide film made from magnesium oxide onto a substrate of the plasma display panel, the process of forming the metal oxide film comprising:

controlling a degree of vacuum in a deposition room within a certain range;

introducing at least one gas selected from the group consisting of oxygen, water, hydrogen, carbon monoxide, and carbon dioxide into the deposition room; and

controlling a partial pressure of the gas introduced into the deposition room within a certain range for controlling an amount of oxygen deficiency in the metal oxide film within a given range.

22. (New) The method according to claim 21, wherein said introducing at least one gas comprises introducing oxygen, and the partial pressure of the oxygen is controlled within a range from 3×10^{-3} Pa to 3×10^{-2} Pa so as to reduce the amount of oxygen deficiency in the metal oxide film.

23. (New) The method according to claim 21, wherein said introducing at least one gas comprises introducing water, and the partial pressure of the water is controlled within a range from 1×10^{-4} Pa to 1×10^{-3} Pa so as to increase the amount of oxygen deficiency in the metal oxide film.

24. (New) The method according to claim 21, wherein said introducing at least one gas comprises introducing hydrogen, and the partial pressure of the hydrogen is controlled within a range from 1×10^{-3} Pa to 5×10^{-2} Pa so as to increase the amount of oxygen deficiency in the metal oxide film.

25. (New) The method according to claim 21, wherein said introducing at least one gas comprises introducing carbon monoxide, and the partial pressure of the carbon monoxide is

controlled within a range from 1×10^{-3} Pa to 5×10^{-2} Pa so as to increase the amount of oxygen deficiency in the metal oxide film.

26. (New) The method according to claim 21, wherein said introducing at least one gas comprises introducing carbon dioxide, and the partial pressure of the carbon dioxide is controlled within a range from 1×10^{-4} Pa to 3×10^{-3} Pa so as to increase the amount of oxygen deficiency in the metal oxide film.

27. (New) An apparatus for manufacturing a plasma display panel (PDP) for forming a metal oxide film onto a substrate of the PDP, said apparatus comprising:

a deposition room;

a gas-introducing means for introducing at least one gas selected from the group consisting of oxygen, water, hydrogen, carbon monoxide, and carbon dioxide into the deposition room;

an exhausting means for exhausting the deposition room;

a partial-pressure detecting means for detecting a partial pressure of the gas in the deposition room;

a degree of vacuum detecting means for detecting a degree of vacuum in the deposition room;

and

a control means for controlling an amount of the gas to be introduced into the deposition room and an amount of evacuation from the deposition room based on information supplied from the partial-pressure detecting means and information supplied from the degree of vacuum detecting means such that the partial pressure of the gas and the degree of vacuum in the deposition room can fall within a given range.